

CYCLIST WATER SUPPLY APPARATUS

BACKGROUND OF THE INVENTION

1. Field of the Invention

The instant invention relates to water supply apparatus and more particularly pertains to a new and improved cyclist water supply apparatus that enables the delivering a liquid to a rider of a bicycle from a plurality of reservoirs selectively. Additionally, the liquid may be imparted to the rider in the form of a stream for drinking or a spray for cooling.

2. Description of the Prior Art

The use of water supply apparatus in combination with bicycles is well known in the prior art. As may be appreciated, these devices have either been of a single reservoir system requiring manual manipulation of the liquid supply to provide a rider of a bicycle a refresher or the like, or they have been limited in the manner of delivering a liquid to a bicyclist. In this connection, there have been several attempts to develop water supply apparatus for use in combination with bicycles which may be easily and efficiently manipulated to provide a rider with liquid refreshment. For example, U.S. Pat. No. 4,095,812 to Rowe sets forth the use of a reservoir securable to a bicycle wherein an elongated delivery tube is removable from the confines of a closure whereby a bicyclist may utilize the retractable tube as a drinking straw to receive fluid from the associated reservoir. The use of a single reservoir by Rowe as well as a rather awkward means of extracting fluid from the reservoir limits the convenience and applicability of the patent to provide a variety of liquids in a plurality of forms as available by the instant invention.

U.S. Pat. No. 4,150,682 to Howarth sets forth the use of a water supply that may be imparted onto the lenses of goggles worn by a motorcyclist in a spray form to clear the goggles of debris in a racing situation. A pressurized tank enables imparting of a spray onto the goggles of the motorcyclist wherein the limited applicability and rather cumbersome nature of the apparatus limits its use on a bicycle that normally requires light weight components for a liquid refreshment system in a typical use situation.

U.S. Pat. No. 4,274,566 to Rowe comprises essentially an improvement over the prior U.S. Pat. No. 4,095,812 in providing a reel-type supply of the flexible drinking tube for use in a bicycle frame environment. While a somewhat improvement in the retraction of the flexible drinking tube, the patent continues to fail in providing a means of supplying alternative fluid sources in either a spray or stream form to a bicycle rider, as does the instant invention.

U.S. Pat. No. 4,441,638 to Shimano is a typical representation of a water supply bottle as used by bicyclists wherein the configuration of the bottle in providing a streamlined shape in the Shimano patent fails to address the problem of fluid supply during the course of riding to a cyclist.

U.S. Pat. No. 4,455,911 to Kusisto provides a somewhat novel means of imparting a cooling source of air to a cyclist wherein an air flow chamber is driven by means of the forward wheel to impart a coolant air flow to a bicycle rider. While a variation of a means to impart a different form of fluid flow to a cyclist, the device fails to provide the multiple fluid supply selectively utilized

by a cyclist to achieve either a cooling effect by a water spray or a refreshment means by use of a fluid stream.

As such, it may be appreciated that there is a continuing need for a new and improved cyclist water supply apparatus which addresses both the problem of multiple fluid storage, compactness, and versatility, and in this respect, the present invention substantially fulfills this need.

SUMMARY OF THE INVENTION

In view of the foregoing disadvantages inherent in the known types of cyclist water supply apparatus now present in the prior art, the present invention provides an cyclist water supply apparatus wherein the same may be completely mounted and positioned for use on a bicycle frame and may be further easily and efficiently utilized during periods of a bicycling endeavor to provide a cyclist with either a spray or stream of liquid from selective sources. As such, the general purpose of the present invention, which will be described subsequently in greater detail, is to provide a new and improved cyclist water supply apparatus which has all the advantages of the prior art cyclist water supply apparatus and none of the disadvantages.

To attain this, the present invention comprises a plurality of reservoirs to selectively supply fluid from either reservoir by means of a valve member to deliver fluid from selective sources to a nozzle that is rotatable to impart either a stream or spray onto a cyclist by means of a diaphragm pump member to facilitate the flow of fluid.

My invention resides not in any one of these features per se, but rather in the particular combination of all of them herein disclosed and claimed and it is distinguished from the prior art in this particular combination of all of its structures for the functions specified.

There has thus been outline, rather broadly, the more important features of the invention in order that the detailed description thereof that follows may be better understood, and in order that the present contribution to the art may be better appreciated. There are, of course, additional features of the invention that will be described hereinafter and which will form the subject matter of the claims appended hereto. Those skilled in the art will appreciate that the conception, upon which this disclosure is based, may readily be utilized as a basis for the designing of other structures, methods and systems for carrying out the several purposes of the present invention. It is important, therefore, that the claims be regarded as including such equivalent constructions insofar as they do not depart from the spirit and scope of the present invention.

Further, the purpose of the foregoing abstract is of enable the U.S. Patent and Trademark Office and the public generally, and especially the scientists, engineers and practitioners in the art who are not familiar with patent or legal terms or phraseology, to determine quickly from a cursory inspection the nature and essence of the technical disclosure of the application. The abstract is neither intended to define the invention of the application, which is measured by the claims, nor is it intended to be limiting as to the scope of the invention in any way.

It is therefore an object of the present invention to provide a new and improved cyclist water supply apparatus which has all the advantages of the prior art cyclist water supply apparatus and none of the disadvantages.